

Dr. Daniel M. Ginosar

Significant research in heterogeneous catalysis in supercritical fluids, solid acid catalysis and supercritical fluid synthesis of nano- and micron-scale materials

Phone: 208.526.9049

Email: daniel.ginosar@inl.gov

Education

Dr. Daniel M. Ginosar received his B.S. in chemical engineering in 1981 from U.C. Davis and his Ph.D. in chemical engineering in 1994 from the University of Kansas.

Experience and Achievements

Dr. Ginosar has been employed at the INL since 1993; he is currently the technical and group leader of the Interfacial Chemistry Research Group in the Chemical Sciences Department. Prior to his graduate work, Dr. Ginosar was employed as an engineer at the UNOCAL San Francisco Refinery from 1981 through 1987. Dr. Ginosar's research interests include heterogeneous catalysis in supercritical fluids, solid acid catalysis, and supercritical fluid synthesis of nano- and micronscale materials and catalysis in harsh environments. He has been awarded nearly \$8,000,000 in research grants with work in the areas of catalytic upgrading of gasoline stocks, chemical production, thermochemical water splitting cycles, waste to fuels, environmental remediation and the production of nanomaterials from supercritical fluids. Dr. Ginosar is currently the principal investigator for a DOE-NE funded research project "Nuclear Hydrogen Catalyst Research" a funds-in CRADA project "Development of a Continuous Flow Solid-Catalytic Biodiesel Production Process" and an internally funded laboratory research project, "Renewable Biomass Carbon for Synthetic Fuels to Support the Hydrogen Economy." Dr. Ginosar has authored multiple peer-reviewed publications, patents and national presentations in these areas.

INL'S LIFETIME ACHIEVEMENT AWARD FOR INVENTORSHIP

Patents

- U.S. Patent 6,086,837 Method of Synthesizing Enriched Decaborane for use in Generating Boron Neutron Capture Therapy Pharmaceuticals
- U.S. Patent 6,103,948 Solid catalyzed isoparaffin alkylation at supercritical fluid and near supercritical fluid conditions
- · U.S. Patent 6,402,952 Apparatus and Method for Extraction of Chemicals from Aquifer Remediation Effluent Water
- U.S. Patent 6,495,204 Method for Modifying Monofilaments, Bundles of Monofilaments, and Fibrous Structural Materials
- U.S. Patent 6,511,601 Method and System for Extraction of Chemicals from Groundwater Remediation Effluent Water
- U.S. Patent 6,579,821 Method for Reactivating Solid Catalysts Used in Alkylation Reactions
- U.S. Patent 6,623,686 System Configured for Applying a Modifying Agent to a Non-Equidimension Substrate
- · U.S. Patent 6,652,654 System Configured for Applying a Multiple Modifying Agent to a Substrate
- U.S. Patent 6,887,283 Transesterification of Triglycerides to Alcohol Esters over Solid Catalysts at Supercritical Fluid Conditions
- U.S. Patent 6,984,768 Method for Destroying Halocarbon Compositions Using A Critical Solvent